

REMARKS

Introduction

Claims 1 - 19 were originally pending in this application. Claim 1 has been amended. Claims 9-19 were previously withdrawn from consideration by the Examiner pursuant to 37 CFR 1.142(b). Claim 3 was previously cancelled. No new matter has been added. Thus, claims 1, 2 and 4-8 remain in this application.

Claim Rejections

35 U.S.C. § 112

Claims 1, 2 and 4-8 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. In view of the amendment as explained in greater detail below, applicant respectfully submits that the indefiniteness noted by the Examiner has been addressed. Accordingly, this rejection is respectfully traversed.

35 U.S.C. § 103 – Obviousness

Claims 1, 2 and 4-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 6,838,027 to Brodi, Jr. et al. (the Brodi '027 patent) in view of U.S. patent application 2004/0229013 to Dooley et al. (the Dooley '013 application) or U.S. patent 5,414,037 to Rao et al. (the Rao '037 patent). Independent claim 1 has been amended to more particularly describe the present invention. Remaining claims 2, 4-8 are each ultimately dependent upon independent claim 1 and include further perfecting limitations. In view of the amendments as explained in greater detail below, applicant cannot agree with the Examiner that the invention claimed would have been

obvious to one of ordinary skill in the art in view of these references. Accordingly, this rejection is respectfully traversed.

The Prior Art

The Brodi '027 Patent

The Brodi '027 patent discloses a method of making an interior trim panel that involves combining extrusion deposition compression molding (EDCM) with injection-compression molding (ICM). More specifically, the Brodi '027 patent discloses loading a trim blank (26) into the cavity (33) of the first mold half (32) and moving the slide (42) into a position so as to divide side A from side B in the mold. (Column 3, ll. 45-51). A plastic melt is then extruded into the core portion (35) of the mold (30) to adhere to the trim blank (26). (FIG. 6). The method of the Brodi '027 patent further discloses moving the slide (42) away from the blade (48) and injecting a plastic melt into the mold cavity to bond to the extruded plastic melt and form the interior trim panel (10). (Column 4, ll. 4-12 and FIG. 7).

However, the Brodi '027 patent does not disclose or suggest a method of manufacturing an interior trim panel assembly that includes the steps of placing a trim panel component into a recess within a mold cavity and injecting a molten thermoplastic material into the mold cavity to bond the component to the injected molten thermoplastic material. Furthermore, the Brodi '027 patent does not disclose or suggest a method of manufacturing an interior trim panel assembly where the steps of injecting molten thermoplastic material into the mold cavity and bonding a trim panel component to the injected molten thermoplastic form a vehicle interior trim panel assembly having at least one integrated trim panel component, as required by independent claim 1, as amended.

The Dooley '013 Application

The Dooley '013 application discloses a method of manufacturing a vehicle interior trim panel assembly having an integrated soft-touch arm rest that includes placing a molded trim panel having a coverstock (40) bonded to a rigid substrate (46) having at least one aperture (48) into a mold cavity (62). The bond between the coverstock (40) and the rigid substrate (46) is then separated by injecting pressurized air through the aperture (48) to define an internal chamber (50). Subsequently, soft foam (54) is injected in to the internal chamber via the aperture (48) to define a soft-touch area (16) within the trim panel assembly (10).

However, the Dooley '013 application does not disclose or suggest a method of manufacturing an interior trim panel assembly that includes the step of placing a trim panel component into a recess within a mold cavity. Furthermore, the Dooley '013 application does not disclose or suggest the step of injecting a molten thermoplastic material into the mold cavity to form a rigid substrate and define a class-A side surface thereon, as required by independent claim 1, as amended.

The Rao '037 Patent

The Rao '037 patent disclose a composition for molding vehicle body panels. More specifically, the Rao '037 patent discloses a composition and a process for molding external vehicle body surfaces, such as vehicle hood assemblies. The process includes providing a resin transfer mold (RTM) and applying a release agent such as a semi-flexible polyester gel coat to the mold. (Column 3, ll. 13-15). A pre-formed glass fiber mat and veil are placed into the mold and a resin. A filler combination is then injected into the mold and left to cure onto the pre-form, thereby providing an exterior body panel that requires little finishing having a class-A surface. (Column 3, ll. 28-34).

However, the Rao '037 patent does not disclose or suggest a method of manufacturing an interior trim panel assembly that includes the steps of placing a trim panel component having a class-A side surface that is visible from the interior of a vehicle into a recess within a mold cavity. Furthermore, the Rao '037 patent does not disclose or suggest the steps of injecting a molten thermoplastic material into a mold cavity to form a rigid substrate and define a class-A side surface thereon that is visible from the interior of a vehicle and bonding the component to the injected molten thermoplastic material to form a vehicle interior trim panel assembly having at least one integrated trim panel component, as required by independent claim 1, as amended.

The Present Invention

In contrast to the prior art, the present invention, as defined in independent claim 1, is directed toward a method of manufacturing an interior trim panel assembly having integrated trim panel components. The method includes providing a die including a pair of die halves cooperating to define a mold cavity to form a interior trim panel where at least one of the die halves includes a surface defining an class-A surface within the mold cavity and a plurality of recesses having a predetermined shape. The method further includes placing at least one trim panel component having a class-A side surface that is visible from the interior of a vehicle and a contact surface into the corresponding recess within the mold cavity and closing the die halves. Next, the method includes injecting a molten thermoplastic material into the mold to form a rigid substrate and define a class-A side surface thereon that is visible from the interior of a vehicle where the injection pressure of the molten thermoplastic material injected into the mold cavity has a predetermined pressure less than the maximum clamp pressure of the die. The method further includes bonding the molten thermoplastic material to the contact surface of the trim panel component within the mold cavity

while the rigid substrate is formed, thereby forming a vehicle interior trim panel assembly having at least one integrated trim panel component.

Argument

35 U.S.C. § 112

Claims 1, 2, 4 – 8 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite relative to use of “predetermined pressure.” Applicants respectfully traverse this rejection. Here, applicant respectfully submits that the expression “predetermined pressure” as used in the present application is not indefinite. Rather, as the Examiner has noted in the recent Office Action, one having ordinary skill in the art would understand that the molten thermoplastic material would be injected into a mold at a pressure less than the mold clamp pressure to prevent the mold from opening during the injection process. However, in the spirit of compromise, claim 1 has been amended with the Examiner’s comments in mind to refer to the injection pressure of the molten thermoplastic material. Accordingly, applicant respectfully submits that claim 1, as amended, distinctly points out the subject matter of the invention. For these reasons, applicant respectfully submits that the present application complies in all respects with the requirements of § 112.

35 U.S.C. § 103

Claims 1, 2 and 4 – 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Brodi ‘027 patent in view of the Dooley ‘013 application or the Rao ‘037 patent. A rejection based on §103 must rest on a factual basis, with the facts being interpreted without hindsight reconstruction of the present invention from the prior art. Furthermore, obviousness is not established by combining the basic disclosures of the prior art to produce the claimed invention absent a teaching or

suggestion that the combination be made. Interconnect Planning Corp. v. Fiel, 774 F.2d 1132, 1143, 227 U.S.P.Q. (BNA) 543, 551 (Fed. Cir. 1985); In re Corkhill, 771 F.2d 1496, 1501-02, 226 U.S.P.Q. (BNA) 1005, 1009-10 (Fed. Cir. 1985). The test for combining references is what the combination of disclosures, taken as a whole, would have suggested to one of ordinary skill in the art. In re Simon, 174 U.S.P.Q. (BNA) 114 (CCPA 1972). The Court of Appeals for the Federal Circuit has stated that:

To properly combine references A and B to reach the conclusion that the subject matter of a patent would have been obvious, case law requires that there must have been some teaching, suggestion, or inference in either reference A or B, or both, or knowledge generally available to one of ordinary skill in the relevant art, which would have led one skilled in the art to combine the relevant teachings of reference A and B. Ashland Oil Inc. v. Delta Resins and Refractories, 776 F.2d 281, 297, n24 (Fed. Cir. 1989).

Thus, it is not sufficient for an examiner merely to state that one cited reference teaches several of the limitations of a claim and another teaches several other limitations of a claim to support a rejection based on obviousness. This approach ignores a cornerstone principal of patent law:

That all elements of an invention may have been old (the normal situation), or some old and some new, or all new, is however, simply irrelevant. Virtually all inventions are combinations and virtually all are combinations of old elements. Environmental Designs v. Union Oil Co. of Cal., 713 F.2d 693, 698 (Fed. Cir. 1983) (other citations omitted).

A patentable invention ... may result even if the inventor has, in effect, merely combined features, old in the art, for their known purpose without producing anything beyond the results inherent in their use. American Hoist & Derek Co. v. Sowa & Sons, Inc., 220 U.S.P.Q. (BNA) 763, 771 (Fed. Cir. 1984) (emphasis in original, other citations omitted).

As the Court of Appeals for the Federal Circuit has noted in the past, “[w]hen a rejection depends upon a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references.” Ecolochem, Inc. v. Southern Calif. Edison, 56 U.S.P.Q. 2d 1065, 1073 (Fed. Cir. 2000). Specifically, the Examiner must show that a person of ordinary skill in the art must not only have had some motivation to combine the prior art teachings, but some motivation to combine the prior art teachings *in the particular manner claimed*. In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000) (emphasis added).

Here, there is simply no motivation to combine the Brodi ‘027 patent with either the Dooley ‘013 application of the Rao ‘037 patent. Moreover, there is no motivation to combine these prior art references in the manner claimed by the present invention. Even assuming that such a motivation existed, a combination of these references would not result in the method of manufacturing a trim panel assembly for the interior of a vehicle having integrated trim panel components of the type described in independent claim 1, as amended.

Rather, the Brodi ‘027 patent and either the Dooley ‘013 application or the Rao ‘037 patent skirt around, but do not suggest the claimed invention *as a whole*. See Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1383 (Fed. Cir. 1986). Specifically, the Brodi discloses a method of manufacturing an interior trim panel that includes providing a trim blank; *extruding a plastic melt* thereon within one half of a mold and *then injecting a plastic melt* into the remaining mold half such that the *injected plastic and the extruded plastic bond* to form a portion of the Class-A side and the Class-B side of a trim panel. On the other hand, the Dooley ‘013 application *teaches away* from the disclosures of the Brodi ‘027 patent by advocating a method of manufacturing an interior trim panel assembly *from injected or extruded plastic melt*. The trim panel *does not include a Class-A side* but provides a coverstock having an exposed surface that is visible from the interior of a vehicle.

Similarly, the Rao '037 patent *teaches away* from the disclosures of the Brodi '027 patent by advocating a composition and process of molding an *exterior vehicle body panel* using a preformed glass fiber mat and injecting glass fiber resin thereon. The Dooley '013 and the Rao '037 methods are entirely contrary to the method disclosed by the Brodi '027 patent. Accordingly, the teachings of the Brodi '027 and either the Dooley '013 or Rao '037 are diametrically opposed and would have to be reconstructed or rearranged to change their operations if they were to be combined.

There is a fundamental axiom in patent law that if a reference must be reconstructed or rearranged to change its operation to meet the applicant's claim, that modification of the reference is inappropriate and cannot stand. It is respectfully submitted that the Examiner is picking and choosing elements from the dissimilar methods disclosed in the Brodi '027 patent, the Dooley '013 application and the Rao '037 patent and combining these elements by restructuring them, using hindsight and the applicant's own disclosure, to conclude that the claimed invention is obvious.

Neither the Brodi '027 patent, Dooley '013 application nor the Rao '037 disclosure teach or suggest a method of manufacturing a vehicle interior trim panel assembly having integrated trim panel components including the steps of placing a trim panel component having a class-A side surface and a contact surface into a recess within a mold cavity and injecting a molten thermoplastic material into the mold cavity to form a rigid substrate and define a class-A side surface thereon where the thermoplastic material bonds to the component, thereby forming a vehicle interior trim panel assembly having at least one integrated trim panel component, as required independent claim 1, as amended. The Brodi '027 patent fails to disclose or suggest a trim panel substrate formed from a single injection of molten thermoplastic material in the manner required by the claims in this case and Dooley '013 and Rao '037 merely disclose methods that are different from the present invention as they do not include a Class-A surface visible from the interior of a vehicle made from an injected

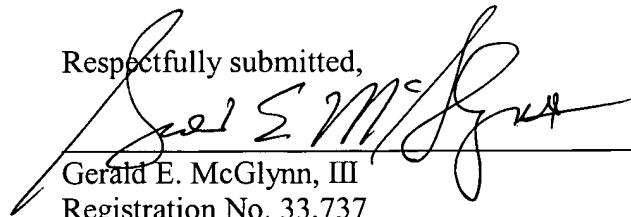
molten thermoplastic material. Thus, applicant respectfully submits that the disclosures of each of these references would have to be improperly modified to meet the limitations of independent claim 1.

Claims 2 and 4 – 8 are ultimately dependent upon independent claim 1 and add further perfecting limitations which cannot be found in, nor are they suggested by, the Brodi '027 patent, the Dooley '013 application, the Rao '037 patent or the remaining prior art references. However, even if they did, they could only be applied through hindsight after restructuring the disclosure of the prior art in view of applicant's invention. A combination of the prior art in this way to derive applicant's invention would, in and of itself, be an invention.

Conclusion

In view of the above, it is respectfully submitted that claims 1, 2 and 4 – 8 are patentably distinguishable over the prior art of record. Accordingly, applicant respectfully solicits the allowance of claims pending in this case.

Respectfully submitted,



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Date: March 23, 2006

Attorney Docket No.: 03855 (3883.00030)